ABSTRACT

A wearable device comprises one or more circuit substrates comprising electrically conductive parts, a radio unit and a loop antenna coupled to the radio unit. The loop antenna comprises a conductor formed into a loop, wherein the electrically conductive parts of at least one of said one or more circuit substrates substantially act as a ground plane for the loop antenna. Said at least one circuit substrate is positioned substantially on the same plane with the loop and such that at least the electrically conductive parts of said at least one circuit substrate are within an area defined by the loop when said at least one circuit substrate and the loop are observed perpendicularly with respect to a plane of the loop in order to minimize the ground plane effect of the electrically conductive parts of said at least one circuit substrate on the loop antenna.

(Figure 1)